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ABSTRACT

Teacher supply and demand are critical policy areas for planning, program funding, and teacher training. Shortages of minority teachers are especially acute, as are shortages in special education. To inform policy decisions at all levels of government, the National Center for Education Statistics collected data during school year 1987-88 through its Schools and Staffing Survey, Teacher Demand and Shortage Survey for Public Schools. Results of that survey are presented and discussed. Of the 2.5 million teachers teaching the nation's approximately 40.3 million public school students, about 86 percent were white. The average student to teacher ratio was 16:1. The highest student to teacher ratios within the same racial/ethnic group occurred among Asian Americans and Hispanics. The largest percentage of minority students attend school in the South, and, by size of school district, minority students are overrepresented in large school districts. Minority teachers are underrepresented in the Northeast and North Central regions, but overrepresented in the South and in large school districts. A total of 1,970 public school districts offered pay incentives to recruit or retain teachers in shortage fields, and free retraining to teach in shortage fields was offered by 5,084 public school districts. Technical notes about the survey methodology are presented in a separate section. Eight tables present survey findings, and the 29-item survey questionnaire is included as an appendix. (SLD)

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TEACHER SHORTAGES: RESULTS OF THE TEACHER DEMAND AND SHORTAGE SURVEY FOR PUBLIC SCHOOLS, 1987-88

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E.D. TABS September 1991

TEACHER SHORTAGES: RESULTS OF THE TEACHER DEMAND AND SHORTAGE SURVEY FOR PUBLIC SCHOOLS, 1987-88

Janice S. Ancarrow
Division of Personnel Preparation

U.S. Department of Education
Office of Special Education and
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Individuals with Disabilities Education Act, Section 618:

"Sec. 618 (a) The Secretary shall ... collect data and conduct studies, investigations, and evaluations --

"(2) to provide -- (A) Congress with information relevant to policymaking, and (B) Federal, State, and local agencies ... with information relevant to program management, administration, and effectiveness ... .

"(b) ... the Secretary ... shall obtain data ... including --

"(5) the number and type of personnel that are employed in the provision of special education ... to handicapped children and youth ... ."

HIGHLIGHTS

Teacher supply and demand are critical policy areas for planning, program funding, and teacher training. Shortages in minority teachers are especially acute, as well as shortages in special education. To inform policy decisions at all levels of government, the National Center for Education Statistics through its Schools and Staffing Survey, Teacher Demand and Shortage Survey for Public School Districts (LEAs), collected data during school year 1987-88. Selected key results of that survey are presented below.

- On October 1, 1987, approximately 40.3 million students were enrolled in our Nation's public school districts, about 70 percent white and 30 percent nonwhite.

- Of the 2.5 million teachers employed in these school districts, about 86 percent were white and 14 percent, nonwhite.

- The average student to teacher ratio was 16:1. The highest student to teacher ratios within the same racial/ethnic group occurred among Asians (68:1) and Hispanics (52:1).

- By region, the largest discrepancy between overall student enrollment and minority student representation was in the North central region, which contained 25 percent of all students, but only 15 percent of minority students.

- The largest percentage of minority students was attending school in the South.

- By size of school district, minority students were overrepresented in large school districts (1,000 or more students).

- For minority teachers, distribution by region showed underrepresentation in the Northeast and North central regions; however, they were by far overrepresented in the South, compared to nonminority teachers.

- Minority teachers were also greatly overrepresented in large school districts when compared with nonminority teachers.

- A total of 1,970 public school districts offered pay incentives to recruit or retain teachers in shortage fields during school year 1987-88. No shortage field was addressed with pay incentives by more districts than was special education.

- Free retraining to teach in shortage fields was offered by 5,084 public school districts. No shortage field was addressed by free retraining by more districts than was special education.

ACKNOWLEDGMENTS

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INTRODUCTION

This report on teacher shortages in public schools presents data on student enrollments, by level, and by race/ethnicity; minority enrollments by region, and district size; full-time-equivalent teachers, by level; number of teachers by race/ethnicity; minority teachers, by region, and by district size; public school districts offering pay incentives to recruit or retain teachers in fields of shortage, by size of school district, and by field; and districts offering free retraining in fields of shortage, by size of school district, and by field. The data were collected on the Teacher Demand and Shortage (TDS) Questionnaire for Public School Districts (LEAs), one of seven questionnaires comprising the 1987-88 Schools and Staffing Survey (SASS), a survey developed by the U.S. Department of Education's National Center for Education Statistics (NCES) and conducted by the U.S. Bureau of the Census. This report provides national estimates for all data.

SASS was a mailout survey that collected public and private sector data on the Nation's elementary and secondary teaching force, aspects of teacher supply and demand, teacher workplace conditions, characteristics of school administrators, and school policies and practices. The seven questionnaires of SASS are as follows:

1. The Teacher Demand and Shortage Questionnaire for Public School Districts (LEA's).
2. The Teacher Demand and Shortage Questionnaire for Private Schools.
3. The School Administrator Questionnaire.
4. The Public School Questionnaire.
5. The Private School Questionnaire.
6. The Public School Teachers Questionnaire.
7. The Private School Teachers Questionnaire.

The reader is advised to exercise caution in the interpretation and use of the data in these tables. Some counts in this data base are underestimates. In addition, differences exist between counts reported here and counts reported on other SASS files, as well as the School Universe File of the Common Core of Data (CCD). A more complete discussion of data issues is provided in the survey methodology, described in the Technical Notes section, which follows presentation of the tables.

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Table 1.--Number of students enrolled in public schools, by level, and number of full-time-equivalent teachers employed, by level: October 1, 1987

Level	Students		Teachers	
	Number	Standard error	Full-time-equivalent	Standard error
Total	40,273,589	177,934.6	2,330,520	9,964.3
Prekindergarten	269,682	5,857.2	13,930	328.7
Kindergarten	3,170,993	17,668.7	112,864	795.1
Grades 1 through 6	18,806,241	96,473.7	1,065,005	5,934.8
Grades 7 through 12	18,026,672	87,982.3	1,138,720	5,506.9

NOTE: Details may not add to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 2.--Number and percentage of public school students and teachers, by race and ethnicity, and student/teacher ratio: School year 1987-88

Race	Students				Teachers				Student/ teacher ratio
			Standard errors				Standard errors		
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Total	39,761,316	100.0	188,662.6	0.47	2,511,304	100.0	20,190.9	0.80	16:1
American Indian/Alaskan Native	420,582	1.1	18,438.0	4.38	14,805	0.6	1,396.9	9.44	28:1
Asian or Pacific Islander	1,120,109	2.8	14,871.6	1.33	16,371	0.7	335.2	2.05	68:1
Hispanic	3,909,594	9.8	43,106.7	1.10	74,778	3.0	1,123.9	1.50	52:1
Black	6,622,747	16.7	44,524.3	0.67	236,042	9.4	3,712.3	1.57	28:1
White	27,688,285	69.6	163,915.2	0.59	2,169,308	86.4	18,313.0	0.84	13:1

NOTE: Details may not add to totals because of rounding.

NOTE: Cell counts may be underestimates because of item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 3.--Number and percentage of all students in public schools, by minority and nonminority status, by region: School year 1987-88

Region	All students				Minority students				Nonminority students			
			Standard errors				Standard errors				Standard errors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	39,761,316	100.0	186,208.6	0.47	12,073,032	100.0	76,993.0	0.64	27,688,285	100.0	163,915.2	0.59
West	8,267,086	20.8	86,925.0	0.22	3,198,889	26.5	43,481.7	0.36	5,068,197	18.3	57,937.3	0.21
North central	9,863,597	24.8	114,313.2	0.29	1,831,804	15.2	25,192.7	0.21	8,031,794	29.0	106,664.6	0.39
Northeast	7,481,413	18.8	98,577.4	0.25	2,015,702	16.7	33,106.2	0.27	5,465,711	19.7	85,804.6	0.31
South	14,149,220	35.6	92,736.6	0.23	5,026,638	41.6	51,787.3	0.43	9,122,583	33.0	81,271.3	0.29

NOTE: Details may not add to totals because of rounding.

NOTE: Cell counts may be underestimates because of item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 4.--Number and percentage of all students in public schools, by minority and nonminority status, by district size: School year 1987-88

District size	All students		Standard errors		Minority students		Standard errors		Nonminority students		Standard errors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	39,761,316	100.0	186,208.6	0.47	12,073,032	100.0	76,993.0	0.64	27,688,285	100.0	163,915.2	0.59
Small (less than 500)	1,138,638	2.9	42,003.3	0.11	158,779	1.3	13,401.4	0.11	979,859	3.5	36,056.9	0.13
Medium (500 - 999)	1,813,359	4.6	66,078.5	0.17	206,231	1.7	18,235.2	0.15	1,607,127	5.8	61,143.6	0.22
Large (1000 or more)	36,809,320	92.6	195,908.5	0.49	11,708,021	97.0	82,864.4	0.69	25,101,299	90.7	164,491.6	0.59

NOTE: Details may not add to totals because of rounding.

NOTE: Cell counts may be underestimates because of item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 5.--Number and percentage of all teachers in public schools, by minority and nonminority status, by region: School year 1987-88

Region	All teachers		Standard errors		Minority teachers		Standard errors		Nonminority teachers		Standard errors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,511,304	100.0	20,313.6	0.81	341,996	100.0	4,612.9	1.35	2,169,308	100.0	18,313.0	0.84
West	442,429	17.6	6,445.5	0.26	61,369	17.9	1,360.9	0.40	381,060	17.6	5,630.4	0.26
North central	651,832	26.0	13,429.5	0.53	55,115	16.1	3,844.3	1.12	596,717	27.5	12,009.1	0.55
Northeast	566,673	22.6	12,491.2	0.50	50,914	14.9	1,196.6	0.35	515,758	23.8	12,146.4	0.56
South	850,370	33.9	7,994.1	0.32	174,598	51.1	1,934.8	0.57	675,772	31.2	7,256.9	0.33

NOTE: Details may not add to totals because of rounding.

NOTE: Cell counts may be underestimates because of item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 6.--Number and percentage of all teachers in public schools, by minority and nonminority status, by district size: School year 1987-88

District size	All teachers				Minority teachers				Nonminority teachers			
			Standard errors				Standard errors				Standard errors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,511,304	100.0	20,313.6	0.81	341,996	100.0	4,612.9	1.35	2,169,308	100.0	18,313.0	0.84
Small (less than 500)	103,706	4.1	4,038.4	0.16	4,548	1.3	557.1	0.16	99,157	4.6	3,965.1	0.18
Medium (500 - 999)	142,860	5.7	6,385.0	0.25	5,700	1.7	766.1	0.22	137,160	6.3	6,338.4	0.29
Large (1000 or more)	2,264,738	90.2	19,305.3	0.77	331,748	97.0	4,557.9	1.33	1,932,990	89.1	17,609.7	0.81

NOTE: Cell counts may be underestimates because of item nonresponse.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 7.--Number and percentage of public school districts offering pay incentives to recruit or retain teachers in fields of shortage, by size of school district, and by field: School year 1987-88

Shortage field	All districts offering incentives				Size of school district											
					Small (less than 500)				Medium (500 - 999)				Large (1000 or more)			
			Standard errors				Standard errors				Standard errors				Standard errors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,970	100.0	176.0	8.93	452	100.0	95.1	21.07	662	100.0	111.9	16.89	856	100.0	83.3	9.73
Special education	335	17.0	30.7	1.56	--	13.0	+	4.05	--	12.5	+	2.54	194	22.6	18.2	2.12
Mathematics	405	20.6	43.7	2.22	--	24.5	+	5.57	142	21.5	25.9	3.92	152	17.8	19.9	2.33
Computer science	190	9.6	27.6	1.40	--	9.3	+	3.45	--	12.2	+	2.85	68	7.9	10.8	1.27
Physical sciences	259	13.1	34.8	1.77	--	7.9	+	3.78	--	16.5	+	3.38	114	13.3	18.0	2.10
Biological/Life sciences	203	10.3	28.4	1.44	--	6.6	+	2.95	--	13.9	+	3.13	82	9.5	12.5	1.46
Bilingual education/ESL	128	6.5	20.3	1.03	--	3.5	+	1.84	--	5.3	+	2.05	77	9.0	11.7	1.37
Foreign languages	154	7.8	24.7	1.25	--	9.0	+	3.52	--	6.5	+	2.21	70	8.2	12.6	1.47
Other	297	15.1	39.7	2.01	--	26.4	+	7.43	--	11.7	+	2.77	100	11.7	13.8	1.61

-- = Too few sample cases (fewer than 30) for a reliable estimate; + = not computed because too few sample cases.

NOTE: Details may not add to totals because of rounding.

NOTE: Cell counts may be underestimates because of item nonresponse.

NOTE: Pay incentives refer to a cash bonus, a different step on the salary schedule, or other salary increase.

NOTE: More than one shortage field may be included for any district--all were marked that apply.

NOTE: Population = all school districts in the Nation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

Table 8.--Number and percentage of public school districts offering free retraining to teach in fields of shortage, by size of school district, and by field: School year 1987-88

Shortage field	All districts offering free retraining				Size of school district											
					Small (less than 500)				Medium (500 - 999)				Large (1000 or more)			
			Standard errors				Standard errors				Standard errors				Standard errors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	5,084	100.0	252.5	4.97	1,424	100.0	204.3	14.35	486	100.0	82.0	16.87	3,174	100.0	164.6	5.19
Special education	750	14.8	49.6	0.98	--	14.0	+	2.71	--	10.5	+	3.25	499	15.7	26.1	0.82
Mathematics	803	15.8	44.8	0.88	--	12.7	+	2.49	--	12.7	+	3.13	561	17.7	29.2	0.92
Computer science	709	13.9	52.7	1.04	254	17.8	47.0	3.30	--	13.1	+	3.23	391	12.3	25.0	0.79
Physical sciences	653	12.8	41.8	0.82	--	11.8	+	2.42	--	10.7	+	2.60	434	13.7	28.2	0.89
Biological/Life sciences	586	11.5	41.2	0.81	--	9.8	+	2.20	--	9.8	+	2.43	400	12.6	29.4	0.93
Bilingual education/ESL	458	9.0	41.3	0.81	--	8.0	+	2.33	--	8.4	+	2.40	304	9.6	26.3	0.83
Foreign languages	404	7.9	32.4	0.64	--	6.6	+	1.78	--	7.9	+	2.58	272	8.6	22.3	0.70
Other	721	14.2	59.8	1.18	276	19.4	46.0	3.23	--	26.9	+	6.36	314	9.9	22.2	0.70

-- = Too few sample cases (fewer than 30) for a reliable estimate; + = not computed because too few sample cases.

NOTE: Details may not add to totals because of rounding.

NOTE: Cell counts may be underestimates because of item nonresponse.

NOTE: All free retraining is included regardless of funding source.

NOTE: More than one shortage field may be included for any district--all were marked that apply.

NOTE: Population = all school districts in the Nation.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1987-88.

TECHNICAL NOTES

The Survey

Sample Selection

Selection of Public School Districts

The public school district sample for the TDS survey of LEAs contained 5,594 LEAs. These are the LEAs associated with the 9,317 public schools in the school sample (including the one school district in Hawaii and the one school district in the District of Columbia); all LEAs in Delaware, West Virginia, and Nevada that were not associated with the sample schools; and a sample of eight LEAs that do not operate schools, but do hire teachers and otherwise serve schools in other LEAs. The LEAs in Delaware, West Virginia, and Nevada were added because the sample LEAS alone were too few to provide reliable State estimates. All 56,242 public and 11,529 private school teachers in the teacher samples were selected from the 9,317 public and 3,513 private school samples. The other SASS samples were as follows: 5,594 public school districts and the administrators (principals) of schools in the public and private school samples.

Selection of Schools

The public school sample of 9,317 schools was selected from the Quality Education Data (QED) file of public schools. All public schools in the file were stratified by the 50 States and the District of Columbia; then by three grade levels (elementary, secondary, and combined). For each stratum within each State, sample schools were selected by systematic (interval) sampling with probability proportional to the square root of the number of teachers within a school. This approach provides a blend of the best estimates for schools and teachers.

Information on the selection of private schools is included in NCES's E.D. Tabs, July 1990, Selected Characteristics of Public and Private School Teachers: 1987-88.

Selection of Teachers

A list that included all full-time and part-time teachers, itinerant teachers, and long-term substitutes was obtained from each sample school. Within each school, teachers were stratified by experience; one stratum included new teachers, and a second stratum included all other teachers. New teachers were those who, counting the 1987-88 school year, were in the first, second, or third year of their teaching career in either a public or private school system. Within each teacher stratum, elementary and secondary teachers were sorted by subject. Elementary teachers were sorted by General Elementary Education, Special Education, and other; secondary teachers were sorted by Mathematics, Science,

English, Social Science, Vocational Education, and other.

The public and private school teacher samples were each designed to include a basic sample and a Bilingual/ESL (English as a Second Language) supplement. The Bilingual/ESL supplement treated as one group the teachers who use a native language other than English to instruct students having limited English proficiency and teachers who provide students having limited English proficiency with intensive instruction in English. The supplement was funded by the Department of Education's Office of Bilingual Education and Minority Language Affairs (OBEMLA) in order to obtain more reliable estimates of Bilingual/ESL teachers.

The basic sample of teachers was allocated to the sample schools in each stratum so that the teacher weights were approximately equal. The specified average teacher sample size for each sample school (4, 8, and 6 teachers for each public elementary, secondary, and combined school, respectively; and 4, 5, and 3 teachers for each private elementary, secondary, and combined school, respectively) was then allocated to the two teacher strata to obtain a 60 percent oversampling of new private school teachers. New teachers were not oversampled in the public sector. Finally, an equal probability systematic sampling scheme was applied to select the basic sample within each school.

The Bilingual/ESL supplement was selected independently from the basic sample and was designed to provide estimates for California, Texas, Florida, Illinois, New York, and all other States. Within a school containing Bilingual/ESL teachers, teachers were selected systematically with equal probability.

The teacher sample sizes were as follows:

Basic samples	
Public	54,340
Private	11,412
Bilingual/ESL supplement samples	
Public	2,258
Private	183

Bilingual/ESL teachers selected in both the basic and supplement samples were unduplicated so that each teacher appears only once in the combined sample of Bilingual/ESL and all other teachers.

For more detailed information about sampling, see the Technical Report released by NCES in May 1991, 1988 Schools and Staffing Survey Sample Design and Estimation.

Data Collection

The TDS Questionnaires were mailed to the sampled LEAs and private schools during late January to late February 1988.

Approximately six weeks after the first mailout, a second set of questionnaires was mailed to those sample cases that had not returned the first questionnaire. One month after the second mailout of the questionnaires, a telephone follow up was begun. Interviewers contacted the sample cases that failed to return a questionnaire and attempted to complete an interview by telephone. All nonresponding cases from the mailout phase were included in the telephone follow up.

Precision of Estimates

Effects of Missing School Districts and Schools

Following the data collection, it was discovered in a comparison of SASS public school estimates with NCES's Public Elementary/Secondary School Universe Survey of the Common Core of Data (CCD) series, that some Class 1 public school districts were not on the frame. Class 1 schools include only elementary schools, and for Nebraska, a comparison of the QED and CCD counts indicated about 275 of these schools, with an average of about 10.2 students per school. Because of these missing schools, the SASS national counts of public schools, administrators, and teachers, and the corresponding counts for Nebraska, in particular, are underestimated. The effects of these missing schools on the nature of the bias for averages is unknown.

Questionnaire Response Rates

Weighted response rates were 90.8 percent for the Public School TDS Questionnaire and 66.0 percent for the Private School TDS Questionnaire. The data were weighted to reflect the universe of public school districts and the universe of private schools. The weights were adjusted subsequently for survey nonresponse. A low response rate for public school districts in Connecticut (61.1 percent) may affect the reliability of State estimates for Connecticut. No State estimates are provided in this report, however.

Item Descriptions

The Teacher Demand and Shortage Questionnaire for Public School Districts is shown in the Appendix. With a few exceptions it is identical to the TDS questionnaire for private schools. Specific data items in the tables and the corresponding source codes are as follows:

Data item	Source code
Number of students	
Prekindergarten	013
Kindergarten	015
Grades 1-6	017
Grades 7-12	019
Total	021

Data item	Source code
FTE teachers	
Prekindergarten	023
Kindergarten	025
Grades 1-6	027
Grades 7-12	029
Total	031
Race of students	
American Indian/Alaskan Native	149
Asian or Pacific Islander	150
Hispanic	151
Black	152
White	153
Race of teachers	
American Indian/Alaskan Native	154
Asian or Pacific Islander	155
Hispanic	156
Black	157
White	158
Pay incentives in shortage fields	
Special education	099
Mathematics	100
Computer science	101
Physical sciences	102
Biological/life sciences	103
Bilingual education/ESL	104
Foreign languages	105
Other	106
Free retraining in shortage fields	
Special education	108
Mathematics	109
Computer science	110
Physical sciences	111
Biological/life sciences	112
Bilingual education/ESL	113
Foreign languages	114
Other	115

Source Code Response Rates

The unweighted average response rate for source codes was 92.9 percent for the TDS questionnaire for public school districts, and 91.5 percent for the TDS questionnaire for private schools. (These rates did not include the source code response rates for questionnaire items 9 and 10, which were deleted from the data tapes because of low response rates and reporting problems.) Data items on both questionnaires were imputed for nonresponse using a hot deck procedure.

Comparative Estimates of Teacher Counts

Estimates of teacher counts from the SASS teacher demand and shortage, teacher, and school files can be expected to differ. First, the data sources are different: They are public school districts, teachers, and schools. Second, the TDS survey yields teacher counts in FTEs (full-time-equivalents); the teacher survey yeilds teacher counts in head counts; and the school survey yields teacher counts in both FTEs and head counts.

The sampling frame for teachers was developed by obtaining from each sample school a list of all full-time and part-time teachers, itinerant teachers, and long-term substitutes. Following data collection, a comparison of the number of teachers on the school lists with the number of teachers (head count) on the school file revealed fewer teachers on the school lists. Fewer teachers on the school lists cause the teacher national estimates from the teacher files to be underestimates relative to the teacher national estimates from the school files.

To obtain an estimate of the magnitude of these underestimates, a Full-Time Equivalent (FTE) count of teachers on the school lists was approximated by adjusting the counts for part-time teachers. This approximated FTE count was weighted up to a national estimate and compared with the national FTE estimate for fall 1987 reported on NCES's Public Elementary/Secondary School Universe Survey of CCD. The CCD estimate was 2 percent higher than the SASS estimate.

Significant differences occur between the FTE teacher estimates obtained on the Teacher Demand and Shortage Questionnaire for Public School Districts and the FTE teacher counts obtained on the fall 1987 CCD. (A difference was considered significant here if it was greater than twice the standard error for the TDS estimate.) The national estimate (kindergarten through grade 12), 2,316,015 is significantly higher than the national count, 2,278,813. Comparisons of State estimates and counts show that TDS estimates were significantly higher for nine States (California, Delaware, Hawaii, Montana, New Hampshire, New York, North Carolina,

Tennessee, and Virginia), and significantly lower for 11 States (Arizona, Florida, Louisiana, Maryland, Nevada, New Mexico, Texas, Utah, Vermont, and West Virginia, and the District of Columbia). Some of these differences may be attributable to the absence of small districts from the QED frame. (See preceding section, effects of missing school districts and schools.)

Although the difference between the TDS estimate and the CCD count for Nebraska is not significant, the TDS estimate is an underestimate, and caution must be exercised in the use and interpretation of this and other TDS estimates for Nevada. This underestimation has occurred because one of the largest school districts in that State did not participate in SASS. The consequent nonresponse adjustment, which takes into account the size of the other districts in Nevada, most of which are much smaller, results in underestimates for Nevada.

Comparison of the private school estimates from the SASS TDS file with the estimates from the SASS private school file is discussed in another report, Aspects of Teacher Supply and Demand in Public School Districts and Private Schools: 1987-88, released by the National Center for Education Statistics, U.S. Department of Education, in August 1991.

Underestimation of the Number of School Districts

Estimated counts of school districts from the TDS data collection are underestimates relative to CCD counts because of missing school districts on the QED frame and a difference between the QED and CCD definition of school district. Unlike CCD, QED defines a school district in terms of location rather than administrative unit. Thus, in those States that house together the offices of more than one school district, the QED estimated count of school districts will be lower than the CCD count.

Significance Tests

The estimates in these tables are based on samples and are subject to sampling variability. Standard errors were estimated using a balanced repeated replication procedure that incorporates the design features of this complex sample survey. The standard errors provide indications of the accuracy of each estimate. If all possible samples of the same size were surveyed under the same conditions, an interval of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the universe value in approximately 95 percent of the cases. Note, however, that the standard errors in the tables do not take into account the effects of biases caused by item nonresponse, measurement error, data processing error, or other systematic error.

These standard errors were used in computing differences of

means t-tests with appropriate Bonferroni adjustments for multiple comparisons. The general t-test formula applied was

$$(A-B) / \sqrt{(S.E._A)^2 + (S.E._B)^2}$$

for independent means. The answer obtained is a z statistic. The z statistic can be used to judge significance: If the absolute value of the z statistic is greater than 1.645, significance is at the 90 percent level; and a z greater than 1.96 is significant at the 95 percent level.

This report involves numerous comparisons, which makes it particularly important to use caution in interpreting small differences. The basic level of significance used in this report as the minimum accepted level of significance is .05 (alpha level), or 95 percent confidence, for comparisons between groups. All such comparisons cited in the text are statistically significant at the .05 level or better, unless otherwise noted. In most cases the comparisons are highly statistically significant; that is, beyond .001, or 99.9 percent confidence. The phrase "no more," as used in this report, indicates that the difference between groups was not statistically significant at the .05 level or better.

The Bonferroni adjustment used was as follows: For comparisons between minority and nonminority teachers or students, dividing the significance level of .05 by two groups, results in an adjusted significance level of .025.

When performing several t-tests, the likelihood increases that at least one of them will yield a misleading result. When no difference between the means or percentages being compared really exists, still a 5 percent chance of getting a t-value of 1.96 occurs from sampling error. Although this 5 percent risk seems acceptable for a single t-test, the risk of getting at least one t-value of 1.96 increases in a series of t-tests. For 5 t-tests, the risk of obtaining one misleading t-score is 23 percent; for 10 t-tests, it is 40 percent; and for 20 t-tests, the risk of getting one t-value of 1.96 from sampling error increases to 64 percent. For t-scores over 1.96, the risk of finding a significant t-score as a result of sampling error decreases.

A balance should be maintained between making multiple tests, one of which can then give misleading results, and making few tests under stringent control of error rates, a strategy likely to fail to find differences when they exist. No simple solution to this dilemma can be found. However, results discussed in the Highlights were tested as described above; and they were found to be highly significant, with better than 99.9 percent confidence that the differences between comparison groups are real.

Geographic Regions Used by the U.S. Bureau of the Census

West

Montana
Idaho
Wyoming
Colorado
New Mexico
Arizona
Utah
Nevada
Washington
Oregon
California
Alaska
Hawaii

Northeast

Maine
New Hampshire
Vermont
Massachusetts
Rhode Island
Connecticut
New York
New Jersey
Pennsylvania

North central/Midwest

Ohio
Indiana
Illinois
Michigan
Wisconsin
Minnesota
Iowa
Missouri
North Dakota
South Dakota
Nebraska
Kansas

South

Delaware
Maryland
District of Columbia
Virginia
West Virginia
North Carolina
South Carolina
Georgia
Florida
Kentucky
Tennessee
Alabama
Mississippi
Arkansas
Louisiana
Oklahoma
Texas

FOR MORE INFORMATION

For more information about this report, contact Janice S. Ancarrow, Office of Special Education Programs, U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202, telephone (202) 732-1074.

APPENDIX

FORM **SASS-1A**
(10-30-87)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR
CENTER FOR EDUCATION STATISTICS
U.S. DEPARTMENT OF EDUCATION

SCHOOLS AND STAFFING SURVEY
TEACHER DEMAND AND SHORTAGE QUESTIONNAIRE FOR PUBLIC SCHOOL DISTRICTS (LEAs)
1987–1988

OMB No. 1850-0621
Approval Expires December 31, 1988

This report is authorized by law (20 U.S.C. 1221e-1). Your answers will be kept strictly **confidential.** The release of information contained on this form is restricted in conformance with the Privacy Act of 1974 (Public Law 93-579, as amended).

RETURN TO

Bureau of the Census
Current Projects Branch
1201 East Tenth Street
Jeffersonville, IN 47132

Please correct any error in name and address including ZIP Code.

Dear District Administrator:

The Center for Education Statistics (CES) of the U.S. Department of Education requests your participation in the Teacher Demand and Shortage Survey for the 1987–88 Schools and Staffing Survey. Your district is one of the 5,600 districts from across the Nation selected to be in the district sample.

The Schools and Staffing Survey is an integrated set of surveys consisting of the Teacher Demand and Shortage Survey, the School and School Administrator Surveys, and the Teacher Survey. These surveys are revisions of previous CES surveys, designed to better measure critical aspects of teacher supply and demand, the composition of the administrator and teacher workforce, and the status of teaching and schooling generally. The purpose of the Teacher Demand and Shortage Survey is to obtain information about such factors as district enrollment, policies, and staff characteristics including the number of teaching positions, by field, that are filled or remain unfilled.

The U.S. Bureau of the Census is conducting the surveys for the Center for Education Statistics by the authority of Section 406(b) of the General Education Provisions Act, as amended (20 USC 1221e). The data will be treated as confidential.

We are conducting this survey with a sample of districts. While this minimizes overall response burden, the value of each individual survey response is greatly increased because it represents many other districts. I, therefore, encourage you to participate in this voluntary survey by completing this questionnaire and returning it within 3 weeks to the Bureau of the Census. A preaddressed envelope is enclosed for your convenience.

I thank you for your cooperation in this very important effort.

Sincerely,

Emerson J. Elliott
Director
Center for Education Statistics

Enclosure

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INSTRUCTIONS

If you are unsure about how to answer a question, please give the best answer you can and make a comment in the "Remarks" section.

If you have any questions, please call the Bureau of the Census collect at (301) 763—2220.

Use the enclosed postage-paid envelope to return this questionnaire to the Bureau of the Census. Please return it within the next 3 weeks.

THANK YOU FOR TAKING PART IN THIS STUDY.

a. Please give your name, title, telephone number, and the most convenient days/time to reach you. This information will be used only if it is necessary to clarify any of your responses.

Name

Title

Telephone number *(Include area code)*

Convenient days/times to reach you, if necessary

b. Does your school district hire and employ elementary and/or secondary teachers? PGM 3

011 1 ☐ Yes — *Go to page 4*
2 ☐ No

IF YOU ANSWERED "NO" TO ITEM (b) ABOVE, PLEASE STOP NOW AND RETURN YOUR QUESTIONNAIRE TO THE BUREAU OF THE CENSUS. THANK YOU FOR YOUR TIME.

Remarks

SECTION A — ENROLLMENT AND TEACHING POSITIONS

GLOSSARY

The following terms are used in questions 2–10. They have been defined here in alphabetical order for your convenience.

Abolished/withdrawn position — Teaching position for which a teacher was sought and could not be found during the recruiting period, resulting in the abolishment/withdrawal/closing of the position.

FTE — Full-time equivalent describes the number of positions in terms of an average full day. The FTE for a given person is derived by dividing the amount of time the person works by the amount of time normally required for a full day.

For example, if a normal teaching day includes 5 periods, report:

- a person teaching 5 periods of English as 1.0 in English;
- a person teaching 3 periods of English and 2 periods of social studies as 0.6 English and 0.4 social studies;
- a person teaching only 3 periods of English as 0.6 English;
- a person teaching English 3 periods and doing guidance counseling the equivalent of 2 periods as 0.6 English; do NOT report the time doing guidance counseling.

Report prekindergarten and kindergarten teachers as 1.0 if they teach a full-day session or two half-day sessions per day. Report them as 0.5 if they teach one half-day session each day.

Record all FTE entries to the nearest tenth.

Laid-off teachers — Teachers whose contracts were not renewed at the end of the 1986–87 school year because of budget limitations, declining enrollments, or elimination of courses, and whose positions were not subsequently filled. Does NOT include those who were "fired" or whose contracts were not renewed for performance reasons.

Newly hired teachers — Teachers newly hired as regular employees by this school system for the 1987–88 school year. Includes teachers returning from unpaid leaves of absence of one year or more. Does NOT include substitute teachers.

Positions vacant, filled by a substitute teacher, or withdrawn — Positions approved for the 1987–88 school year (budgeted new positions or position vacancies) which were vacant, filled by a substitute teacher, or withdrawn as of October 1, 1987, **because a suitable candidate could not be found.**

Regular or standard state certification — Pertains to a teacher who has met your state's regular or standard certification requirements in his or her assigned field(s), i.e., subject area. Includes those who have completed all necessary course work and practice teaching and are eligible for full certification upon completion of a probationary period. **NOTE** — Teachers with only emergency or other nonstandard certification are NOT considered "certified" for this survey's purpose.

1. How many students (in head counts) were enrolled in this district on or about October 1, 1986, and October 1, 1987?

(If your district has "ungraded" students, allocate the total number of such students into the enrollment categories as best you can based on the approximate grade levels of the students.)

Category (1)	Enrollment Fall 1986 (2)	Enrollment Fall 1987 (3)
a. Prekindergarten	012 ____ o ☐ None	013 ____ o ☐ None
b. Kindergarten	014 ____ o ☐ None	015 ____ o ☐ None
c. Grades 1–6	016 ____ o ☐ None	017 ____ o ☐ None
d. Grades 7–12	018 ____ o ☐ None	019 ____ o ☐ None
e. **Total**, all levels	020 ____ o ☐ None	021 ____ o ☐ None

2. Enter the number of FTE teachers hired and employed by this district at each of the following levels as of October 1, 1986, and as of October 1, 1987. Do not include student teachers or substitute teachers.

(Record FTE teachers to the nearest tenth.)

FTE teachers (1)	Oct. 1, 1986 (2)	Oct. 1, 1987 (3)
a. Prekindergarten	022 ____ . o ☐ None	023 ____ . o ☐ None
b. Kindergarten	024 ____ . o ☐ None	025 ____ . o ☐ None
c. Grades 1–6	026 ____ . o ☐ None	027 ____ . o ☐ None
d. Grades 7–12	028 ____ . o ☐ None	029 ____ . o ☐ None
e. **Total** FTE teachers	030 ____ .	031 ____ .

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SECTION A — ENROLLMENT AND TEACHING POSITIONS — *Continued*

3. **If your records do not classify teachers by the grade ranges indicated in item 2, mark the box at right and indicate the grades you included in categories c and d of item 2.**

032 1 ☐ Records not by grade ranges in item 2

	Category c		Category d
033	1 ☐ 1st	041	7 ☐ 7th
034	2 ☐ 2nd	042	8 ☐ 8th
035	3 ☐ 3rd	043	9 ☐ 9th
036	4 ☐ 4th	044	10 ☐ 10th
037	5 ☐ 5th	045	11 ☐ 11th
038	6 ☐ 6th	046	12 ☐ 12th
039	7 ☐ 7th		
040	8 ☐ 8th		

Refer to item 2 on page 4.

4. **Record the total FTE teachers who teach grades K–12, i.e., the 1987 total FTE teachers minus the 1987 prekindergarten.**

047 ____.

5a. **As of October 1, 1987, how many FTE teaching positions were vacant or temporarily filled by a substitute teacher?**

048 ____.
0 ☐ None

b. **How many FTE teaching positions were abolished or withdrawn between the start of the hiring season and October 1, 1987?**

049 ____.
0 ☐ None

c. **Record total of (a) and (b) above.**

050 ____.
0 ☐ None

6. **Record the total number of FTE teaching positions approved for the 1987–88 school year.**
(Sum of entries in items 4 and 5c)

051 ____.

7. **Of the total FTE teachers cited in item 4, how many hold regular or standard state certification in their fields of assignment?**

052 ____.

8a. **As of October 1, 1987, how many FTE teachers were newly hired by this school district for the 1987–88 school year?**

053 ____. *Continue with 8b*
0 ☐ None — *Skip to Check Item A below*

b. **How many of these newly hired FTE teachers hold regular or standard state certification in their fields of assignment?**

054 ____.
0 ☐ None

CHECK ITEM A **In question 5a above, you were asked for the number of FTE teaching positions that were vacant or temporarily filled by a substitute teacher. Would you be able to easily provide separate counts for (a) positions temporarily filled by substitutes, and (b) other vacant positions for which you are still recruiting?** *(Do not provide counts; just indicate whether the data are available.)*

055
1 ☐ Yes
2 ☐ No

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SECTION A — ENROLLMENT AND TEACHING POSITIONS — *Continued*

INSTRUCTIONS FOR QUESTIONS 9 AND 10 — *Please fill in the two tables about this district's teaching positions by field of assignment (i.e., subject area). Use listed subject fields to the fullest extent possible. When no appropriate field is listed, use "other." In cases where teachers are assigned to more than one field, apportion time spent in each field.*

If your district does not have any of grades K–6, mark (X) the box and skip to question 10. → PGM 3 056 1 ☐ No grades K–6 — *Skip to item 10*

GRADES K–6 TEACHERS — FTE

9. Please fill in the table about your FTE teaching positions for grades K–6.

(See definition of FTE on page 4.)

PGM 4 (a)	Number of FTE teachers as of October 1, 1987			Number of FTE positions	
	Total FTE teachers (b)	Total number of NEWLY HIRED FTE teachers (c)	NEWLY HIRED FTE teachers holding regular or standard state certification in field of assignment (d)	FTE positions vacant, filled by a substitute teacher or withdrawn as of 10/1/87 because a suitable candidate could not be found (e)	FTE teachers laid off at the end of the 1986-87 school year (f)
1. KINDERGARTEN	.	.	.	.	.
2. GENERAL ELEMENTARY (Exclude kindergarten)	.	.	.	.	.
SPECIAL AREAS (Exclude kindergarten and general elementary					
3. Art	.	.	.	.	.
4. Basic skills and remedial education *	.	.	.	.	.
5. Bilingual *	.	.	.	.	.
6. Computer science	.	.	.	.	.
7. English as a second language (ESL)	.	.	.	.	.
8. English language arts	.	.	.	.	.
9. Foreign language	.	.	.	.	.
10. Gifted *	.	.	.	.	.
11. Health, physical education	.	.	.	.	.
12. Home economics	.	.	.	.	.
13. Industrial arts	.	.	.	.	.
14. Mathematics	.	.	.	.	.
15. Music	.	.	.	.	.
16. Science	.	.	.	.	.
17. Reading	.	.	.	.	.
18. Religion/philosophy	.	.	.	.	.
19. Social studies/social science	.	.	.	.	.
20. SPECIAL EDUCATION (TOTAL)	.	.	.	.	.
a. Mentally retarded	.	.	.	.	.
b. Emotionally disturbed	.	.	.	.	.
c. Learning disabled	.	.	.	.	.
d. Speech and hearing impaired	.	.	.	.	.
e. Other special education	.	.	.	.	.
21. ALL OTHERS	.	.	.	.	.
22. TOTAL GRADES K–6 * *	.	.	.	.	.

* If bilingual, basic skills, gifted, or remedial education teachers teach general elementary or specific areas (e.g., remedial math or bilingual science), count them only in the bilingual, basic skills, gifted, or remedial education categories.

* * Entry in column (b) of line 22 should equal sum of entries in categories b and c in column (3) of item 2 on page 4.

ASS-1A (10-30-87)

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SECTION A — ENROLLMENT AND TEACHING POSITIONS — *Continued*

If your district does not have any of grades 7–12, mark (X) the box and skip to Check Item B. → PGM 3 057 1 ☐ No grades 7–12 — *Skip to Check Item B on page 8*

GRADES 7–12 TEACHERS — FTE

10. Please fill in the table about your FTE teaching positions for grades 7-12.

(See definition of FTE on page 4.)

PGM 5 (a)	Number of FTE teachers as of October 1, 1987: Total FTE teachers (b)	Total number of NEWLY HIRED FTE teachers (c)	NEWLY HIRED FTE teachers holding regular or standard state certification in field of assignment (d)	Number of FTE positions: FTE positions vacant, filled by a substitute teacher, or withdrawn as of 10/1/87 because a suitable candidate could not be found (e)	FTE teachers laid off at the end of the 1986-87 school year (f)
1. GENERAL ELEMENTARY	.	.	.	.	.
2. Art	.	.	.	.	.
3. Basic skills and remedial education *	.	.	.	.	.
4. Bilingual *	.	.	.	.	.
5. Business education	.	.	.	.	.
6. Computer science	.	.	.	.	.
7. English as a second language (ESL)	.	.	.	.	.
8. English language arts	.	.	.	.	.
9. Foreign language	.	.	.	.	.
10. Health, physical education	.	.	.	.	.
11. Home economics	.	.	.	.	.
12. Industrial arts	.	.	.	.	.
13. Mathematics	.	.	.	.	.
14. Music	.	.	.	.	.
15. Reading	.	.	.	.	.
16. Religion/philosophy	.	.	.	.	.
17. Social studies/social science	.	.	.	.	.
18. SCIENCE (TOTAL)	.	.	.	.	.
a. Biology	.	.	.	.	.
b. Chemistry	.	.	.	.	.
d. Earth science	.	.	.	.	.
c. Physics	.	.	.	.	.
e. General and all other science	.	.	.	.	.
19. SPECIAL EDUCATION (TOTAL)	.	.	.	.	.
a. Mentally retarded	.	.	.	.	.
b. Emotionally disturbed	.	.	.	.	.
c. Learning disabled	.	.	.	.	.
d. Speech and hearing impaired	.	.	.	.	.
e. Other special education	.	.	.	.	.
20. VOCATIONAL EDUCATION	.	.	.	.	.
21. ALL OTHERS	.	.	.	.	.
22. TOTAL GRADES 7–12 * *	.	.	.	.	.

* If bilingual, remedial education, or basic skills teachers teach specific subject areas (e.g., remedial reading or bilingual math), count them only in the bilingual, remedial education or basic skills category.

* * Entry in column (b) of line 22 should equal entry in category d of column (3) in item 2 on page 4.

SECTION A — ENROLLMENT AND TEACHING POSITIONS — *Continued*

CHECK ITEM B **Column (e) on pages 6 and 7 is labeled "FTE positions vacant, filled by a substitute teacher, or withdrawn as of 10/1/87 because a suitable candidate could not be found." Would you be able to easily provide each piece of information separately, that is, separate counts for vacant positions, separate counts for positions filled by substitute teachers, and separate counts for positions withdrawn?** *(Do not provide the counts; just indicate whether the data are available.)* PGM 3

058 1 ☐ Yes
2 ☐ No

CHECK ITEM C **On page 6, did you make any entries in column (b) of the Special Areas section (lines 3–19)?**

059 1 ☐ Yes — *Continue with item 11a*
2 ☐ No — *Skip to Check Item D below*

11a. **Are any of the Special Area teachers reported in column (b) on page 6 assigned to more than one teaching field** *(e.g., a teacher who teaches both math and science)*?

060 1 ☐ Yes — Continue with *11b*
2 ☐ No — *Skip to Check Item D below*

b. **Approximately what percent of the Special Area teachers reported in column (b) on page 6 have more than one field of assignment?**
(Record percent in whole numbers, not tenths. Do not enter a decimal point.)

061 _____ .0 %

c. **How was their time allocated in column (b) on page 6?**
Mark (X) only one box.

062 1 ☐ Split between subject fields according to actual FTE's (e.g., 0.3 math and 0.7 science)
2 ☐ Split equally between the fields regardless of actual FTE (e.g., 0.5 math and 0.5 science)
3 ☐ By primary field of assignment only

d. **In completing column (d) on page 6 for new teachers with more than one assignment field, were you able to report certification status for all fields of assignment?**

063 1 ☐ Yes
2 ☐ No
3 ☐ Not applicable

CHECK ITEM D **Did you report any teachers in column (b) on page 7?**

064 1 ☐ Yes — *Continue with item 12a*
2 ☐ No — *Skip to item 13*

12a. **Are any of the teachers reported in column (b) on page 7 assigned to more than one field** *(e.g., a teacher who teaches both math and physics)*?

065 1 ☐ Yes — *Continue with 12b*
2 ☐ No — *Skip to Check Item E below*

b. **Approximately what percent of the teachers reported in column (b) on page 7 have more than one field of assignment?**
(Record percent in whole numbers, not tenths. Do not enter a decimal point.)

066 _____ .0 %

c. **How was their time allocated in column (b) on page 7?**
Mark (X) only one box.

067 1 ☐ Split between subject fields according to actual FTE's (e.g., 0.7 math and 0.3 science)
2 ☐ Split equally between the fields regardless of actual FTE (e.g., 0.5 math and 0.5 physics)
3 ☐ By primary field of assignment only

d. **In completing column (d) on page 7 for new teachers with more than one assignment field, were you able to report certification status for all fields of assignment?**

068 1 ☐ Yes
2 ☐ No
3 ☐ Not applicable

CHECK ITEM E **On page 7, teaching field number 17 is "Social studies/social science." Would you be able to easily provide separate counts for each specific field such as history, geography, government/civics, psychology, economics, and sociology?** *(Do not provide the counts; just indicate whether the data are available.)*

069 1 ☐ Yes
2 ☐ No

SECTION B — DISTRICT POLICIES

Teacher Compensation

13. Which of the following benefits are available to teachers in your district?

Mark (X) all that apply.

GENERAL MEDICAL INSURANCE

070 1 ☐ District (or other organization) pays part or all of premium

2 ☐ Teachers pay all of premium

DENTAL INSURANCE

071 3 ☐ District (or other organization) pays part or all of premium

4 ☐ Teachers pay all of premium

GROUP LIFE INSURANCE

072 5 ☐ District (or other organization) pays part or all of premium

6 ☐ Teachers pay all of premium

073 7 ☐ PENSION CONTRIBUTIONS

INCOME-IN-KIND

074 8 ☐ Housing

075 9 ☐ Meals(Include free or reduced price lunch)

076 10 ☐ Transportation

078 12 ☐ REIMBURSEMENT FOR TEACHERS' TUITION AND COURSE FEES

079 13 ☐ Other — *Specify* _____

14. How many days or months is the normal work year for a teacher receiving a full salary?

(Report in whole days or whole months, whichever is appropriate for your district.)

080 _____ Days

OR

081 _____ Months

15. What is the normal yearly starting salary in your district for a teacher with a bachelor's degree and no previous teaching experience?

(Enter salary amount in whole dollars. Do not include benefits.)

082 $ _____ .00 per year

16. According to your salary schedule, what is the normal yearly contract salary for —

a. A teacher with a master's degree (or its equivalent in credits beyond the bachelor's degree) and no previous teaching experience?

083 $ _____ .00 per year

b. A teacher with a master's degree (or its equivalent in credits) and 20 years of teaching experience?

084 $ _____ .00 per year

17. What is the AVERAGE GROSS yearly salary paid to teachers in your district? *(Exclude benefits.)*

085 $ _____ .00 per year

18a. In this school year, does your district have a "merit pay" plan for teachers? *(A "merit pay" plan is a system in which a teacher's performance is a significant factor in determining his or her compensation.)*

086 1 ☐ Yes — *Continue with 18b*

2 ☐ No — *Skip to 19*

b. How is this performance-based compensation given?

Mark (X) all that apply.

087 1 ☐ Cash bonus (i.e., supplement(s) to regular compensation over the year but no permanent increase in salary)

088 2 ☐ One-time step increase on the salary schedule

089 3 ☐ Other salary increase (e.g., increase in base salary or salary classification)

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SECTION B — DISTRICT POLICIES — *Continued*

Teacher Compensation — *Continued*

The following definitions of pay incentives pertain to questions 19a–d.

Cash bonus — An amount of money given once within an interval of time as an incentive to a person to teach in a particular field or location.

Different step on salary schedule — Placement of a teacher on a higher step of the salary schedule if the teacher agrees to teach in a particular field or location.

Other salary increase — Increase in base salary or other raise in salary through reclassification (other than a step increase on the salary schedule).

19a. Does your school district use any of the pay incentives listed above to recruit or retain teachers to teach in less desirable locations or in fields of shortage?

090 1 ☐ Yes — *Continue with 19b*
2 ☐ No — *Skip to 20a*

b. Which of these pay incentives are offered to attract teachers to less desirable locations?

Mark (X) all that apply.

091 1 ☐ Cash bonus
092 2 ☐ Different step on salary schedule
093 3 ☐ Other salary increase
094 4 ☐ None of the above

c. Which of these pay incentives are offered to attract teachers to fields specified by your district as fields of shortage?

Mark (X) all that apply.

095 1 ☐ Cash bonus
096 2 ☐ Different step on salary schedule
097 3 ☐ Other salary increase
} Continue with 19d
098 4 ☐ None of the above — *Skip to 20a*

d. In which fields are any of these incentives offered?

Mark (X) all that apply.

099 1 ☐ Special education
100 2 ☐ Mathematics
101 3 ☐ Computer science
102 4 ☐ Physical sciences
103 5 ☐ Biological/life sciences
104 6 ☐ Bilingual education/ESL
105 7 ☐ Foreign languages
106 8 ☐ Other — *Specify* _____

20a. Is free retraining available in your school district (regardless of funding source) to prepare staff members to teach in fields with current or anticipated shortages?

107 1 ☐ Yes — *Continue with 20b*
2 ☐ No — *Skip to 21*

b. What are the fields for which this free training is provided?

Mark (X) all that apply.

108 1 ☐ Special education
109 2 ☐ Mathematics
110 3 ☐ Computer science
111 4 ☐ Physical sciences
112 5 ☐ Biological/life sciences
113 6 ☐ Bilingual education/ESL
114 7 ☐ Foreign languages
115 8 ☐ Other — *Specify* _____

Remarks

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SECTION B — DISTRICT POLICIES — *Continued*

Teacher Hiring And Retirement Policies

21. Which of the following criteria are used in SCREENING applicants for hiring in your district?

a. Full standard state certification for field to be taught.

116 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

b. At least emergency or temporary state certification or endorsement for field to be taught.

117 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

c. Graduation from a state approved teacher education program.

118 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

d. College major or minor in field to be taught.

119 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

e. Passage of a local DISTRICT test of basic skills or subject knowledge.

120 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

f. Passage of a STATE test of basic skills.

121 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

g. Passage of a STATE test of subject knowledge.

122 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

h. Passage of the National Teachers Examination.

123 1 ☐ Not used
2 ☐ Used as criterion but not required
3 ☐ Required for hiring

22a. Are teachers in your district covered by a retirement plan?

124 1 ☐ Yes — *Continue with 22b*
2 ☐ No — *Skip to page 12*

b. What is the minimum age at which a teacher can retire this year without penalty?

125 ☐☐ Age — *Continue with 22c*
126 1 ☐ No minimum age requirement — *Skip to item 22d*

c. What is the minimum number of years of service for retirement AT THIS AGE?

127 ☐☐ Years of service
128 1 ☐ No minimum service requirement } *Skip to page 12*

d. How many years of service are required for a teacher to retire without penalty?

129 ☐☐ Years

SECTION B — DISTRICT POLICIES — *Continued*

High School Graduation Requirements

If your district does not serve any of grades 10–12, mark (X) the box and skip to question 24. →

130 1 ☐ Does not serve any of grades 10–12 — *Skip to item 24*

23a. How many years of instruction are students in your district required to complete for high school graduation in each of the following subject areas? *(Write in the number of years of instruction required for the graduating class of 1987 and the class of 1988. Record the number to the nearest tenth, e.g., 3.0, 2.5, etc. If none, mark the "None" box in the cell.)*

Subject area (a)	Class of 1987 (b)	Class of 1988 (c)
1. English/language arts	131 . o ☐ None	132 . o ☐ None
2. Mathematics/ computer science	133 . o ☐ None	134 . o ☐ None
3. Social sciences, social studies (e.g., history, geography, economics)	135 . o ☐ None	136 . o ☐ None
4. Physical and biological sciences	137 . o ☐ None	138 . o ☐ None
5. Foreign language	139 . o ☐ None	140 . o ☐ None
6. Other — *Specify*	141 . o ☐ None	142 . o ☐ None

b. Do the requirements for 1988 reflect a 3-year or a 4-year program?

143 1 ☐ 3-year program
2 ☐ 4-year program
3 ☐ Other — *Specify* _____

Remarks

SECTION C — OTHER DISTRICT INFORMATION

24a. Are any students in your district eligible for ECIA Chapter 1 assistance? — 144 — 1 ☐ Yes — *Continue with 24b* / 2 ☐ No — *Skip to 25a*

b. How many students are eligible for Chapter 1 assistance? — 145 — ☐ Students

c. How many students receive Chapter 1 assistance? — 146 — ☐ Students / o ☐ None

25a. Are any students in your district eligible for free or reduced price lunch programs? — 147 — 1 ☐ Yes — *Continue with 25b* / 2 ☐ No — *Skip to 26*

b. How many students are eligible for the special lunch programs? — 148 — ☐ Students

26. How many students in this district are —

a. American Indian or Alaskan Native? — 149 — ☐ Students / o ☐ None

b. Asian or Pacific Islander? — 150 — ☐ Students / o ☐ None

c. Hispanic, regardless of race *(Mexican, Puerto Rican, Cuban, Central or South American, or other Hispanic culture or origin)*? — 151 — ☐ Students / o ☐ None

d. Black (not of Hispanic origin)? — 152 — ☐ Students / o ☐ None

e. White (not of Hispanic origin)? — 153 — ☐ Students / o ☐ None

27. How many teachers in this district are — *(Record head counts, not FTE's.)*

a. American Indian or Alaskan Native? — 154 — ☐ Teachers / o ☐ None

b. Asian or Pacific Islander? — 155 — ☐ Teachers / o ☐ None

c. Hispanic, regardless of race *(Mexican, Puerto Rican, Cuban, Central or South American, or other Hispanic culture or origin)*? — 156 — ☐ Teachers / o ☐ None

d. Black (not of Hispanic origin)? — 157 — ☐ Teachers / o ☐ None

e. White (not of Hispanic origin)? — 158 — ☐ Teachers / o ☐ None

SECTION D — RESPONDENT INFORMATION

28. What is the title of the person primarily responsible for filling out this questionnaire?

Mark (X) only one box.

159
1 ☐ LEA/District Personnel Administrator
2 ☐ Curriculum Coordinator, Department Head
3 ☐ Teacher
4 ☐ Secretary
5 ☐ Other — *Specify* 7

_____

29. Please enter the date you finish this survey. ⟶	Month	Day	Year
			88

THIS COMPLETES THE QUESTIONNAIRE.

THANK YOU FOR ASSISTING US IN THIS IMPORTANT RESEARCH.

YOUR TIME AND EFFORT ARE MUCH APPRECIATED.

Return in the enclosed postage-paid envelope to:

Bureau of the Census
Current Projects Branch
1201 East Tenth Street
Jeffersonville, IN 47132